Presidential Biography

Paul W. Bosland

President of ASHS, 2012–2013

*Regents Professor of Horticulture Director, Chile Pepper Institute,
New Mexico State University, Las Cruces*

As an ASHS Member for more than 30 years, Paul W. Bosland is known fondly in New Mexico as The Chileman, where he leads the chile pepper breeding and genetics program. He grew up in northern San Diego County in southern California. At the time, there were avocado and citrus orchards, strawberry fields, staked tomato fields, and a thriving nursery industry. He became interested in plant breeding at a very early age. As a schoolboy, he went to the second-hand store and bought old watches. The reason? He had heard that the luminescent hands on the watches were radioactive, and he scraped off the material to try to induce mutants in marigolds. The experiment was a failure, but it was the initiation of his love of horticulture and plant breeding.

After completing two years at Palomar Junior College, he transferred to University of California–Davis (UC–Davis), where he earned a BS degree in 1976 in genetics, and a MS degree in vegetable crops in 1977. While at UC–Davis, he also earned a secondary teaching credential and subsequently taught horticulture at the high school and the community college level. Additionally, he worked in the Cooperative Extension Service as a Research Associate administering vegetable trials in California. After these

experiences, he continued his education at the University of Wisconsin–Madison, and earned his PhD in plant breeding and plant genetics in 1986. He joined the faculty in the Department of Horticulture at New Mexico State University in 1986, where he rose through the ranks to become Regents Professor of Horticulture, Distinguished Achievement Professor, and Director of the Chile Pepper Institute.

Bosland has served ASHS in many capacities, including: Fellows Screening Committee (2009–2011); ASHS-2007 Intel International Science and Engineering Fair judge; ASHS Publications Committee (2007–2009); ASHS

Outstanding Graduate Educator Committee (2005–2008); ASHS Outstanding International Horticulturist Committee (2003–2006); Associate/Contributing Editor, Journal of ASHS (2002–2006); reviewer for all three ASHS journals; Vegetable Publication Awards Committee; Vegetable Breeding Working Group; Germplasm Working Group; Herbs and Spices Working Group; and he organized the ASHS symposium on “Chile Peppers as a Spice Crop in the Southwest.”

Bosland’s awards have included ASHS Fellows Award, ASHS Outstanding Graduate Educator Award, New Mexico Distinguished Public Service Award, Who’s Who in America, Who’s Who in American Education, Kermit A. Olson Memorial Lecture, University of Minnesota, University Research Council Award for Exceptional Achievements in Creative Scholarly Activity, NMSU Distinguished Research Award, Dennis Darnell Faculty Achievement Award, Wilson’s Guide to Experts in Science and Technology, 2000 Outstanding Scientists of the 20th Century, 2000 Outstanding Intellectuals of the 21st Century, 1st Edition, Distinguished Award for Graduate Teaching/Achievement, Gamma Sigma Delta, International Programs Globe of the Month Award, and the infamous IgNobel, Harvard University.

ASHS Presidential Address: Horticulture Creates a Healthier, Happier World

Paul W. Bosland

Palm Desert, CA, 24 July 2013

I began preparing this address by reviewing the 1913 ASHS Presidential Address by Ulysses Prentiss Hedrick titled “Multiplicity of Crops as a Means of Increasing the Future Food Supply.” I did this to get an idea of the state of horticulture 100 years ago as a comparison to where we are today. Hedrick writes about the “hard times at hand and famine ahead,” while alluding to the fact that “multiplicity” (diversity) of crops may be the answer to world famine. In 1913 the world population was 1.8 billion—today it is 7 billion. Hedrick states that everyone agrees that there are three ways to solve the problem of world famine: 1) conservation of resources, 2) greater acreage under cultivation, and 3) increased yields. He then says there is a fourth consideration,

a “multiplicity of crops.” He meant that along with agronomic crops, horticultural crops need to be grown to increase the food supply.

Professor Hedrick listed dozens of horticultural crops of the future that may alleviate hunger. A couple have actually become standard in our food aisle, like blueberries and avocados, while others are still being studied, like tepary beans of the Southwest, *Amaranthus*, Chinese jujube, and the paw-paw tree. Others have not made much progress in 100 years, for example, *Opuntia* cactus, swamp potato, and the cloudberry.

He was also disappointed in the progress of breeding these new crops because as he said “Art is long and time is fleeting.” One must understand that in 1913 the science of

genetics was still fairly new. In fact, the term “genetics” had been introduced into science lexicon only eight years earlier.

If we fast-forward to today, famine is not an agricultural production issue, but a political and economical issue. The world produces enough food to feed everyone; it is the lack of distribution of food that currently causes famine. In the United States, more people are dying from obesity-caused diseases than from starvation. According to the National Institutes of Health, being obese is the second leading cause of preventable death in the United States, close behind tobacco use. An estimated 300,000 deaths per year are due to the obesity epidemic. Another 79,000 people die from type 2 diabetes each year in the